

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Nobuhiro Umeda et al.

Application No.: 10/566,820

Confirmation No.: 9030

Filed: January 30, 2006

Art Unit: N/A

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For: PHENYLAZOLE COMPOUNDS,  
PRODUCTION PROCESS AND  
ANTIOXIDANTS

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Examiner: Not Yet Assigned

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (IDS)**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This Information Disclosure Statement is submitted in accordance with 37 C.F.R. 1.97, 1.98, and it is requested that the information set forth in this statement and in the listed documents be considered during the pendency of the above-identified application, and any other application relying on the filing date of the above-identified application or cross-referencing it as a related application.

1. This IDS should be considered, in accordance with 37 C.F.R. 1.97, as it is filed:  
(Check one of the boxes A-D)

- ☐ A. within three months of the filing date of the above-identified national application or within three months of the entry into the national stage of the above identified national application
- ☒ B. before the mailing date of a first office action on the merits, or a first office action after filing a request for continued examination.
- ☐ C. after (A) and (B) above, but before final rejection or allowance, and Applicants have made the necessary statement in box "i" below or paid the necessary fee in box "ii" below.

(check one of the boxes "i" and "ii" below:)

☐ i. Counsel states that, upon information and belief, each item of information listed herein was (check one of boxes (a) or (b))

☐ (a) first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS; or

☐ (b) not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of undersigned after making reasonable inquiry, was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.

☐ ii. A check for the fee set forth in 1. 17(p), presently believed to be \$180, is enclosed.

☐ D. after (A), (B) and (C) above, but before payment of the issue fee: Applicant petitions under 37 C.F.R. 1.97(d) for the consideration of this IDS. Under 37 CFR 1.17(i) a check in the amount of \$180.00 is enclosed. Counsel certifies that, upon information and belief, each item of information listed herein was

(check one of the boxes "a" and "b" below:)

☐ (a) first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS; or

☐ (b) was not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of undersigned after making reasonable inquiry, was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.

2. In accordance with 37 C.F.R. 1.98, this IDS includes a list (e.g., form PTO/SB/08) of all patents, publications, or other information submitted for consideration by the office, either incorporated into this IDS or as an attachment hereto. A copy of each document listed is attached, except as explained below.

(check boxes A, B and/or C and fill in blanks, if appropriate.)

- ☒ A. Pursuant to the 37 C.F.R. § 1.98(a)(2)(ii), a copy/copies of the U.S. **Patent(s) and/or U.S. Patent Application Publication(s)** on PTO/SB08 is/are not being submitted.
- ☐ B. Document(s) \_\_\_\_\_ is (are) deemed substantially cumulative to document(s) \_\_\_\_\_, and, in accordance with 1.98(c), only a copy of each of the latter documents is enclosed.
- ☐ C. Certain documents were previously cited by or submitted to the Office in the following prior applications, which are relied upon under 35 U.S.C. 120:

<<INSERT SERIAL NO. & FILING DATE>>

Applicant identifies these documents by attaching hereto copies of the forms PTO-892, PTO-1449 and/or PTO/SB/08 from the files of the prior application(s) or a fresh PTO/SB/08 listing these documents, and request that they be considered and made of record in accordance with 1.98(d). Per 37 CFR 1.98(d), copies of these documents need not be filed in this application.

- ☒ 3. Cite No(s). BA-BC and BE-BF are not in the English language.  
In accordance with 1.98(c), Applicant states:
- ☒ An English translation of document No. BA-BC and BE-BF (or of the pertinent portions thereof), or a copy of each corresponding English-language patent or application, or English-language abstract (or claim) is enclosed.
- ☐ The requirement for a concise explanation of the relevance of any foreign language document is satisfied by the attached search report; citation of the documents cited in the search report shall not be construed as an admission that they are or are considered to be, material to patentability of the subject matter claimed herein (See MPEP §609).
- ☐ A concise explanation of the relevance of document(s) \_\_\_\_\_ is set forth as follows: [Insert concise explanation of relevance]
- ☐ A concise explanation of the relevance of document(s) \_\_\_\_\_ can be found on page(s) \_\_\_\_\_ of the specification.
- ☐ A concise explanation of document(s) \_\_\_\_\_ can be found on the attached sheet.

- ☐ 4. No explanation of relevance is necessary for documents in the English language (see reply to Comments 67 in the preamble to the final rules; 1135 OG 13 at 20).
- ☐ 5. Other information being provided for the examiner's consideration follows:

[A/An \_\_\_\_\_ Search Report, dated \_\_\_\_\_, which issued during the prosecution of \_\_\_\_\_ Application No. \_\_\_\_\_ which corresponds to the present application.]


6. In accordance with 37 C.F.R. 1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search has been made or that information cited is, or is considered to be, material to patentability as defined in §1.56 (b), or that any cited document listed or attached is (or constitutes) prior art. Unless other-wise indicated, the date of publication indicated for an item is taken from the face of the item and Applicant reserves the right to prove that the date of publication is in fact different.

Early and favorable consideration is earnestly solicited.

The Commissioner is authorized to charge any deficiency of up to \$300.00 or credit any excess in this fee to Deposit Account No. 04-0100.

Dated: February 14, 2007

Respectfully submitted,

By  *for Darby*  
\_\_\_\_\_  
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Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/566,820-Conf. #9030
				Filing Date	January 30, 2006
				First Named Inventor	Nobuhiro Umeda
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	2	Attorney Docket Number	20241/0203932-US0

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AA*	US-5,393,775-A	02-28-1995	Le Baut et al.	
	AB*	US-4,301,169	11-17-1981	Yamanaka et al.	
	AC*	US-5,376,681-A	12-27-1994	Aono et al.	
	AD*	US-5,552,552-A	09-03-1996	Ohkawa et al.	
	AE*	US-4,006,243	02-01-1977	Strehlke et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	BA	DE-3407505-A1	09-05-1985	Nattermann A & CIE	Abstract attached	✓
	BB	JP-55-69567-A	05-26-1980	Yamanaka et al.	Corresponds to Cite No. AB	
	BC	JP-5-140142-A	06-08-1993	Takeda Chemical Industries, Ltd.	Corresponds to Cite No. AC	
	BD	WO-96/28437-A1	09-19-1996	Hoechst Marion Roussel, Inc.		
	BE	JP-6-228136-A	08-16-1994	Takeda Chemical Industries, Ltd.	Corresponds to Cite No. AD	
	BF	FR-2267101	04-11-1975	Schering Aktiengesellschaft	Corresponds to Cite No. AE	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* CITE NO.: Those application(s) which are marked with an single asterisk (\*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	"Neuroleptic Activity in 5-Aryltetrapydro-γ-carbolines" by HARBERT et al., Journal of Medicinal Chemistry, June, 1980, Vol. 23, No. 6, pp. 635-643.	
	CB	"Pyridine Hydrochloride-Catalyzed Fischer Indole Reactions" by WELCH, SYNTHESIS - International Journal of Methods in Synthetic Organic Chemistry, 1977, No. 9, September, pp. 645-646.	
	CC	"Synthesis of Some Conformationally Restricted Analogues of Fentanyl <sup>1</sup> ", by BERGER et al., Journal of Medicinal Chemistry, Vol. 20, April 1977, No. 4, pp 600-602.	
	CD	"Lipid Peroxidation in Liver: Hydroxy Dimethyl Carbazole, A New Potent Inhibitor" by MALVY, et al., Biochemical and Biophysical Research Communications, Vol. 95, No. 2, July 31, 1980, pp734-737.	
	CE	"5-Aminocoumarans: Dual Inhibitors of Lipid Peroxidation and Dopamine Release with Protective Effects against Central Nervous System Trauma and Ischemia" by OHKAWA et al., Journal of Medicinal Chemistry, February 14, 1997, Vol. 40, No. 4, American Chemical Society, pp. 559-573.	
Examiner Signature			Date Considered

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/566,820-Conf. #9030
				Filing Date	January 30, 2006
				First Named Inventor	Nobuhiro Umeda
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	2	of	2	Attorney Docket Number	20241/0203932-US0

	CF	Measurement of Thiobarbituric acid Value in Liver Homogenate Solubilized with Sodium dodecylsulphate and Variation of the Values Affected by Vitamin E and Drugs" by MASUGI et al., Vitamins (Japan) 51, 1977, pp. 21-29.	
	CG	"Cleavage of Structural Proteins during the Assembly of the Head of Bacteriophage T4" by LAEMMLI, Nature, Vol. 227, August 15, 1970, pp. 680-685.	
	CH	"5-Lipoxygenase Inhibitory Activity of Zileuton1" by CARTER et al., The Journal of Pharmacology and Experimental Therapeutics, Vol. 256, No. 3, March 1991, pp. 929-937.	
	CI	"A Spectrophotometric Microtiter-Based Assay for the Detection of Hydroperoxy Derivatives of Linoleic Acid" by AUERBACH, et al., Analytical Biochemistry, Vol. 201, No. 2, March 1992, pp. 375-380.	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
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